

SEQUENCE LISTING

<110> Director-General of Agency of Industrial Science and Technology

<120> Expression Systems for Transcription of Functional Nucleic Acids

<130> 117F0059

<140>

<141>

<150> JP 10/244755

<151> 1998-8-31

<160> 23

<170> PatentIn Ver. 2.0

<210> 1

<211> 136

<212> RNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: the nucleotide  
sequence of Rz2

<400> 1

accguugguu uccguagugu agugguuauc acguucgccu aacacgcgaa aggucccccgg 60  
uucgaaaccg ggcacuacaa acacaacacu gaugaggacc gaaagguccg aaacggggcac 120  
gucggaaacg guuuuu 136

<210> 2

<211> 142

<212> RNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: the nucleotide  
sequence of Rz3

<400> 2

accguugguu uccguagugu agugguuauc acguucgccu aacacgcgaa aggucccccgg 60  
uucgaaaccg ggcacuacaa accaacacac aacacugaug aggaccgaaa gguccgaaac 120  
gggcacgucc gaaacgguuu uu 142

<210> 3

<211> 128

<212> RNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: the nucleotide  
sequence of Rz1

<400> 3

accguugguu uccguagugu agugguuauc acguucgccu aacacgcgaa aggucccccgg 60  
 uucgaaaccg ggcacccaca caacacugau gaguccguga ggacgaaacg ggcaccucga 120  
 gcgcuuuu 128

<210> 4

<211> 95

<212> RNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: the nucleotide  
 sequence of the transcript of human placental tRNA<sup>Val</sup>

<400> 4

accguugguu uccguagugu agugguuauc acguucgccu aacacgcgaa aggucccccgg 60  
 uucgaaaccg ggcggaaaca aagacagucg cuuuu 95

<210> 5

<211> 149

<212> RNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: the nucleotide  
 sequence of Rz4

<400> 5

accguugguu uccguagugu agugguuauc acguucgccu aacacgcgaa aggucccccgg 60

uucgaaaccg ggcacccggg uggcugucac cggaagugcu uuccggucuc augaguccgu 120  
gagggcgaaa cagccacucg agcgcuuuu 149

<210> 6

<211> 110

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: the sequence  
of a sense oligonucleotide linker

<400> 6

aattcaggac tagtcittta ggtcaaaaag aagaagctti gtaaccgttg gtttccgtag 60  
tgtagtgggtt atcacgttcg cctaacacgc gaaaggctcc cggttcgaag 110

<210> 7

<211> 113

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: the sequence  
of an antisense oligonucleotide linker

<400> 7

tcgaattcga accggggacc tttcgcgtgt taggcgaacg tgataaccac tacactacgg 60  
aaaccaacgg ttacaaagct tctttctctt ttigacctaa aagactagtc ctg 113

<210> 8

<211> 53

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: the sequence  
of a sense oligonucleotide linker

<400> 8

cgaaaccggg caccgggga atataacctc gagcgctttt ttctatcgc gtc

53

<210> 9

<211> 54

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: the sequence  
of an antisense oligonucleotide linker

<400> 9

tcgacgcgat agaaaaaag cgctcgaggt tatattcccc gggcgcccg ttc

54

<210> 10

<211> 23

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: the sequence  
of an upper primer

<400> 10

cgccagggtt tcccagtcac gac

23

<210> 11

<211> 101

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: the sequence  
of a lower primer including the sequences of Rzl  
and a terminator

<400> 11

ctgcaggctg acgcgataga aaaaaagcgc tcgagggtgcc cgtttcgtcc tcacggactc 60  
atcagtgttg tgtgggtgcc cggtttcgaa ccgggacatt t 101

<210> 12

<211> 109

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: the sequence  
of a lower primer including the sequences of Rz2  
and a terminator

<400> 12

ctgcaggctcg acgcgataga aaaaaaccgt ttccgacgtg cccgtttcgg tcctttcgg 60  
ctcctcagct gtgtgtgtgt tagtgcccg ttctgaaccg gggaccttt 109

<210> 13

<211> 106

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: the sequence  
of a lower primer including the sequences of Rz3  
and a terminator

<400> 13

ctgcaggctcg acgcgataga aaaaaaccgt ttccgacgtg cccgtttcgg tctcctcag 60  
tgtgtgtgtgt tggttttag tagcccggttt cgaaccgggg accttt 106

<210> 14

<211> 40

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: the sequence  
of a probe specific for the reference RNA

<400> 14

aaatcgctat aaaaagcgct cgaggttatg ctccccgggt

40

<210> 15

<211> 16

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: the sequence  
of a probe specific for the ribozyme

<400> 15

ctcatctgtg ttgtgt

16

<210> 16

<211> 20

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: the sequence  
of a primer for b-actin

<400> 16



giggccatct ctigctcgaa

20

<210> 17

<211> 18

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: the sequence  
of a primer for the ribozyme

<400> 17

gaccittcgg tcctcatc

18

<210> 18

<211> 20

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: the sequence  
of an upper oilgonucleotide primer

<400> 18

gactacctca tgaagatcct

20

<210> 19

<211> 20

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: the sequence  
of a lower oligonucleotide primer

<400> 19

gtggccatct ctgctcgaa

20

<210> 20

<211> 18

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: the sequence  
of an upper oligonucleotide primer

<400> 20

gttatcacgt tgcctaa

18

<210> 21

<211> 18

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: the sequence  
of a lower oligonucleotide primer

<400> 21

gacctttcgg tccatcatc

18

<210> 22

<211> 18

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: the sequence  
of a probe specific for the ribozyme

<400> 22

acgcgaaagg tccccggt

18

<210> 23

<211> 19

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: the sequence  
of a probe specific for b-actin

<400> 23

gcgggaaaaat cgtgcgtga

19

SEQUENCE LISTING FREE TEXT

SEQ ID NO. 1: Nucleotide sequence of Rz2.

SEQ ID NO. 2: Nucleotide sequence of Rz3.

SEQ ID NO. 3: Nucleotide sequence of Rz1.

SEQ ID NO. 4: Nucleotide sequence of human placental tRNA<sup>Val</sup> transcript.

SEQ ID NO. 5: Nucleotide sequence of Rz4.

SEQ ID NO. 6: Nucleotide sequence of a sense oligonucleotide linker.

SEQ ID NO. 7: Nucleotide sequence of an antisense oligonucleotide linker.

SEQ ID NO. 8: Nucleotide sequence of a sense oligonucleotide linker.

SEQ ID NO. 9: Nucleotide sequence of an antisense oligonucleotide linker.

SEQ ID NO. 10: Nucleotide sequence of an upper primer.

SEQ ID NO. 11: Nucleotide sequence of a lower primer comprising sequences of Rz1 and a terminator.

SEQ ID NO. 12: Nucleotide sequence of a lower primer comprising sequences of Rz2 and a terminator.

SEQ ID NO. 13: Nucleotide sequence of a lower primer comprising sequences of Rz3 and a terminator.

SEQ ID NO. 14: Nucleotide sequence of a reference RNA-specific probe.

SEQ ID NO. 15: Nucleotide sequence of a ribozyme-specific probe.

SEQ ID NO. 16: Nucleotide sequence of a primer for  $\beta$ -actin.

SEQ ID NO. 17: Nucleotide sequence of a primer for ribozyme.

SEQ ID NO. 18: Nucleotide sequence of an upper oligonucleotide primer.

SEQ ID NO. 19: Nucleotide sequence of a lower oligonucleotide primer.

SEQ ID NO. 20: Nucleotide sequence of an upper oligonucleotide primer.

SEQ ID NO. 21: Nucleotide sequence of a lower oligonucleotide primer.

SEQ ID NO. 22: Nucleotide sequence of a ribozyme-specific probe.

SEQ ID NO. 23: Nucleotide sequence of a  $\beta$ -actin-specific probe.